REGIONAL ADVANCE MITIGATION PLANNING:
EXPEDITING INFRASTRUCTURE WHILE PROVIDING ENVIRONMENTAL AND COMMUNITY BENEFITS

California's public agencies spend billions of dollars each year on needed infrastructure projects to meet the growing need for roads, bridges, levees and other facilities. California hosts an extraordinarily rich array of valuable natural communities and ecosystems that provide habitat for rare wildlife, and are the source for Californians' drinking water and open space for healthy recreation. As California grows, it is imperative that it be done in a manner that protects and enhances the state's natural resources. For three years, state and federal agencies in California have been working together to develop an innovative way to advance needed infrastructure projects more efficiently and provide more effective conservation of our natural resources – through Regional Advance Mitigation Planning (RAMP).

Regional advance mitigation planning incorporates both a "regional" geographic component and an "advance" time frame. The regional component will allow state and federal agencies to consider the environmental impacts of several planned infrastructure projects at once. The "advance" time frame will identify regional mitigation opportunities that will satisfy anticipated mitigation requirements early in the project planning and environmental review process, *before* the projects are in the final stages of approval. Working together, natural resource and infrastructure agencies can estimate mitigation needs early in the projects' timelines, avoiding permitting and regulatory delays and allowing public mitigation dollars to stretch further by securing and conserving valuable natural resources on a more economically efficient scale and before related real estate values escalate.

This innovative approach differs from the way many infrastructure projects are typically funded and implemented, wherein the agencies engage in project-by-project mitigation, usually near the end of a project's environmental review, with insufficient consideration of regional or statewide conservation priorities. Although this type of mitigation is still a valid approach, permitting delays can occur when appropriate mitigation measures cannot be easily identified and agreed upon, and the cost of mitigation often increases between the time the project is planned and funded and the time mitigation land is acquired. As a result, infrastructure agencies end up paying top dollar to satisfy mitigation requirements. Project-by-project mitigation also often overlooks regional conservation needs and ecosystem-scale impacts to sensitive species and habitat, thereby missing critical opportunities for efficient, reliable, and biologically relevant mitigation. Additionally, the opportunity for greater benefits to water and air quality and public health are lost.

LIMITATIONS OF THE CURRENT SYSTEM

The current project-by-project, species-by-species mitigation approach has limitations and can often result in:

- small, unconnected, and poorly protected mitigation sites;
- infrastructure project delays when suitable mitigation land can't be found;
- high compensation ratios required, adding to mitigation cost, when the infrastructure project has a temporal impact on affected species and habitats;
- limited or no connection to regional or statewide conservation priorities;
- more costly and challenging management of protected or restored mitigation land; and,
- additive administrative or support costs associated with requirements to develop separate agreements and implementation mechanisms for each individual project.

CHALLENGING ISSUES

Despite the time savings, reduced costs, and improved environmental and community benefits of regional advance mitigation, it is often difficult to put into practice. The challenges include:

- uncertainty about obtaining assurances from state and federal regulatory agencies that natural resources secured and conserved for mitigation in advance of project-specific environmental review will ultimately be acceptable;
- uncertainty about which projects will mature beyond planning infancy to reality (thereby justifying the cost and effort of proactive mitigation acquisitions);
- providing ongoing monitoring and management of environmentally sensitive lands for any lengthy period of time in advance of a specifically identified mitigation need; and
- obtaining funding, because mitigation dollars are usually tied to specific infrastructure projects, and advance mitigation projects usually have to compete for funds with infrastructure projects.

A COLLABORATIVE PARTNERSHIP

A RAMP Work Group formed in the spring of 2008 to explore the potential for implementing regional advance mitigation in California. Work group participants include representatives from the California Department of Water Resources, California Department of Transportation (Caltrans), U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, National Oceanic Atmospheric Administration, California Department of Fish and Game, California Wildlife Conservation Board, California Department of Parks and Recreation, University of California, Davis, The Nature Conservancy and the Resources Legacy Fund. The Work Group committed to working together on RAMP through a Memorandum of Understanding.

The RAMP Work Group's efforts are guided by a work plan developed in December 2008. The RAMP Work Group is currently developing a Statewide Framework document intended to convey to lawmakers and agency leaders the goals, benefits, and operational framework of a statewide RAMP initiative. The Statewide Framework will be completed by November 2010. The Statewide Framework will have a companion document, the RAMP Manual, which will serve as a comprehensive guidance document for planning and implementing regional advance mitigation throughout California. Development of the RAMP Manual will draw from lessons learned during development and completion of an advance mitigation assessment for a pilot region in the Sacramento Valley. The assessment, which will be completed in the spring 2011, will provide the strategy for implementing advance mitigation in the pilot region.

OPTIONS BEING EXPLORED

The concepts of regional advance mitigation planning are currently being explored as part of the RAMP Work Group, and solutions have been developed and proposed. Some of these proposals include:

- Create a "trust" or "revolving" fund that would be available for advance mitigation acquisitions.
- Increase the ability of regulatory agencies to work collaboratively to describe and quantify "mitigation credits" that could be created by any acquisition/restoration projects funded by the revolving fund.
- Plan and implement advance mitigation in a pilot region to demonstrate the feasibility and benefits of a RAMP initiative.
- Legislation to establish a Regional Advance Mitigation program in California.

- Caltrans' proposal to develop a Statewide Advance Mitigation Initiative (SAMI), in which federal funds would be used to provide the capital needed for compensatory mitigation needs in advance of project delivery through a RAMP model. Off-site biological mitigation for future projects could be estimated and a conservative portion of the estimate could be purchased in advance in a programmatic approach. This proposal could reduce project delays, reduce mitigation costs and improve mitigation quality. Caltrans and federal and state agencies in the RAMP Work Group are preparing an MOU that ensures support for SAMI and a commitment to start developing a program by the Summer 2011.

BENEFITS OF RAMP

Advance environmental mitigation is not a new concept, and is being implemented in other states, such as Colorado and North Carolina. In California, Caltrans and DWR have engaged for over a decade in limited mitigation planning and acquisition efforts for project impacts that are expected to occur in the future; however, those efforts have not been entirely successful and a regional advance mitigation program does not exist. The RAMP Work Group has recognized that implementation of a regional advance mitigation planning program could result in:

- Assurances and incentives (in addition to the cost savings of well planned RAMP acquisitions and restoration) that will help ensure that Caltrans, DWR, and other infrastructure agencies' RAMP project is delivered faster and more economically efficient than the current approach to mitigation.

- Increased funding authority and discretion for regional advance mitigation plans and RAMP mitigation projects. RAMP credits could be used for RAMP projects or other publicly funded infrastructure projects in a streamlined, flexible manner, thereby resulting in net cost savings, project delivery efficiencies, and improved environmental and community benefits.

- Improved collaboration between infrastructure funding agencies and natural resources agencies on infrastructure project environmental review and mitigation, and better coordination between mitigation planning efforts and other conservation planning efforts.

- Mitigation planning that will be more proactive and less reactive, more systematic and less haphazard, multifunctional rather than single purpose, large scale rather than small scale, and better integrated with other planning efforts, resulting in larger scale, more meaningful and cost-effective conservation that advances statewide and regional environmental goals.

The RAMP Work Group has also identified numerous benefits that could result from implementing a regional advance mitigation planning program. These benefits could include:

- lower mitigation costs and permit streamlining for the infrastructure funding agency;

- fewer permitting or regulatory delays resulting from the need for mitigation;

- greater ecological and financial predictability;

- mitigation site planning, management, and monitoring efficiencies;

- the ability to focus on large scale conservation in order to provide benefits to sensitive species through higher quality habitat, improved connectivity between habitat areas, and better long-term protection;

- the ability to leverage and assist ongoing conservation efforts; and

- Greater "co-benefits" to the environment and community, including cleaner water and air, open space and recreational opportunities, and improved public health.